

REMARKS

A petition for a one month extension of time has today been filed as a separate paper and a copy is attached hereto.

Responsive to paragraph 2 of the office action paragraph [0054] has been amended to mention additional elements shown in FIG.1 of the drawings.

The examiner's objection to the abstract (paragraph 3 of the office action) has also been addressed here by appropriate amendment of the abstract.

The objection to the disclosure in paragraph 4 of the office action has been addressed by amendment of paragraph 39 to adopt the language suggested by the examiner.

The objection to the disclosure as stated in paragraph 5 of the office action is respectfully traversed for the reason that the meanings of the various drawing reference numbers in question, e.g. 4-m+1 would be readily apparent to those skilled in the art, as they were to the examiner.

The objection to the disclosure as set forth in paragraph 6 of the office action has also been addressed by amendment. Of course, no Japanese application issued as a US patent.

The error in claim 15 noted in paragraph 7 of the office action has been corrected.

The objection in paragraph 8 of the office action is traversed. The subject of the wherein clause in claims 12 and 13 (not claims 13 and 14) is "each", not "units" as stated by the examiner. The prepositional phrase "of said conveyance apparatus units" modifies the subject ("each").

The rejection under the second paragraph of 35 USC 112 is believed to be moot in view of the fact that the "such as" language has been canceled from claims 1 and 7 and "transversely" has been replaced by "horizontally" in claims 4 and 10.

The rejection of Claims 1-18 for Obviousness over Bonora et al in view of Brain et al

The examiner will note that independent claims 1 and 7 have been amended to define the conveyance apparatus as comprising "at least one branch portion extending from said main portion [main conveyance path] toward said array [of plural treatment

apparatuses], for temporarily holding containers in standby". This newly recited structure is exemplified by "branch 22", a number of which are shown in Figs. 6 and 9 of the drawings. The branch conveyance paths 22 and the advantages they offer are discussed at page 29, line 5 to page 31, line 24, at page 34, lines 3-12 and line 12 and at page 34, lines 3-12 of applicants' specification. The branch conveyance paths facilitate a sorting function whereby a given container can be removed from a given position in the queue of containers on the main portion of the conveyance apparatus, moved to a branch conveyance path and reinserted in the queue at any position. Neither Bonora et al, Brain et al nor any combination thereof suggests such a conveyance apparatus inclusive of branch portions.

Independent claims 1 and 7 have also been amended to additionally recite a "lifter" as described, for example, at page 18, lines 4-9 and at page 30, lines 15-25 of applicants' specification. As described there, and as exemplified by "lift means 12" in Figs. 4, 5, 7 and 8, the lifter has the functional capability of turning the container, e.g. through 90 deg. The Bonora et al and Brain et al references do not suggest any device with such a functional capability.

At page 7 of the office action the examiner characterizes Brain et al as teaching that transfer devices such as OHS and OHT give "the advantages of reducing footprint and arrival time, and increasing capacity" and then states that motivation for combining the Bonora et al and Brain et al references would have been "to reduce footprint and arrival time and to increase the capacity of the system." The undersigned can find no such teaching in Brain et al. In a conventional system neither an OHS nor an OHT can sufficiently achieve any of the aforementioned advantages because, as Brain et al clearly teach, e.g. at page 77, right hand column, and at page 80, both an OHT and an OHS require stockers, which frustrates any objective of raising productivity per unit area in a clean room.

Attention is also directed to the fact that Bonora et al require a separate "transfer assembly 18" at each treatment apparatus. A container must be moved from the conveyor onto a storage station 19 and then from the storage station 19 to a load port 22. In contradistinction, the presently claimed system has the capability of transferring a container from the conveyance apparatus directly to the port (interface device) of any treatment apparatus.

Regarding claims 3 and 11 (see Figs. 10 and 11), neither the terminology "considerable variation" nor the explanation thereof at column 6, lines 34-47, of Bonora et al is suggestive of vertically offset, parallel plural main conveyance paths.

The Rejection of Claims 1-17 for Obviousness Over Otaguro et al in view of Brain et al

This rejection is traversed for the reason that Otaguro et al is disqualified as prior art by 35 USC 103(c).

The present application (USSN 10/516,824) and U.S. Patent No. 6,702,099 (Otaguro et al) were, at the time the invention described and claimed in the present application was made, owned by the same company (Hirata Corporation of Japan) and continue to today to be owned by that same company.

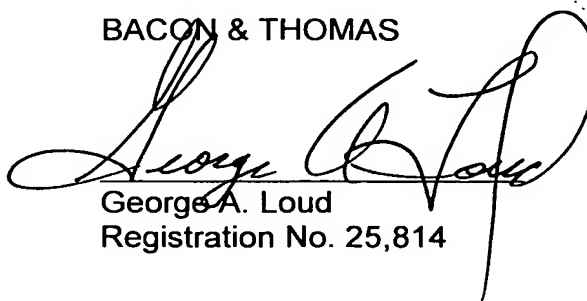
The Obviousness-type Double Patenting Rejection of Claims 1-18

The rejection for obviousness-type double patenting is believed to be obviated by the terminal disclaimer submitted herewith.

In conclusion, the examiner is respectfully requested to reconsider the rejections of record in light of this submission, with a view toward allowance of the pending claims as amended.

Respectfully submitted,

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